

Work Order ID 89361

89361

Page 1

August-24-12 1:32:25 PM

Item ID: D3687-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: MOUNT

Start Date: 8/21/12 Start Qty: 8.00

8

Cust Item ID:

Required Date: 8/21/12 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/08/29 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3687	Rev C								

100

0.00

100

Outsource1

0.00

Outsource process - Heat Treat

Memo

Send M174B3937X4750 For heat treating
to CONDITION H-900(to become M174PHH900B3937X4750)
FTU IN EXCESS OF 190 KSI
FTU IN EXCESS OF 170 KSI

CERTIFICATE IS REQUIRED

NIA

105

0.00

105

Outsource5

0.00

Outsource process - Machining

Memo

Issue P/O: 17859
Machine as per Dwg D3687
Possible Supplier: Globus Precision
Conformity sheet required

CL 12/09/10 (8) 12

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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8

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Required Date: 8/21/12 Req'd Qty: 8.00

8

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

42/01/14 (12)

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

INSPECT HOLE ALIGHMENT USING DT9707 JIG

DAS 16 12/16/14

(42)

124

0.00

124

Purchasing

Memo

0.00

Purchasing

Issue P/O FOR LIQUID PENETRATION

P/O #: 18468

Certificate of conformity is required

B/ 12-11-20

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

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QA Closed: _____ Date: _____

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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
125	Receive & Inspect for Damage & Mat'l Certs	0.00							
125									
Packaging	Memo	0.00							
Packaging	ENSURE NDT RESULT IS ATTACH								
126	QC5- Inspect part completeness to step on W/O	0.00							
126									
QC	Memo	0.00							
Quality Control									
127	QC6- Inspect dimensions to drawing	0.00							
127									
QC	Memo	0.00							
Quality Control	DIMENSIONAL CHECK, ENSURE THAT BOLT HOLES ARE CORRECT SIZE								

Handwritten signature and date 8/22/12

Handwritten stamp: DAS 15 2-8 1211.26

Handwritten stamp: 12/14/12

Handwritten number 12

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld					
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved						
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other					
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset							
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

Work Order ID 89361

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Page 4

August-24-12 1:32:25 PM

Item ID: D3687-1

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Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: MOUNT

Start Date: 8/21/12 Start Qty: 8.00

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Cust Item ID:

Required Date: 8/21/12 Req'd Qty: 8.00

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Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Identify as per dwg & Stock Location: GA

0.00

130

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

12/11/27 (12)

12/11/28 JG

B/12-11-27

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

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QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Material <input type="checkbox"/>												
Setup <input type="checkbox"/>												
Other <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
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FAULT CATEGORY												
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Picklist Print

August-24-12 1:32:24 PM

Page 1

Work Order ID: 89361

Parent Item: D3687-1

Parent Item Name: MOUNT

Start Date: 8/21/12

Required Date: 8/21/12

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A New Issue 08-01-15 JLM Verified By:EC
 IPP Rev:B Added Contion H-900 JLM Verified By:DD IPP REV C: ADDED QC6
 10.09.09 JLM VERIFIED BY DD
 IPP REV D:ADDED DT9707 INSPECTION JIG 11-01-05 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174PH- H900B3.937X4.750 17-4SS Bar H900-3.937x4.750		Purchased	No			100	f	9.8430	0.33333	2.66664			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT005		9.843							
				112374		1.843							
				122683		8							
D3687-1P MOUNT		Purchased	No			105	Each	0.0000	1	8			

2 12-8-29

2.7 + 1.4

12-9-18

10/24/14 (12)

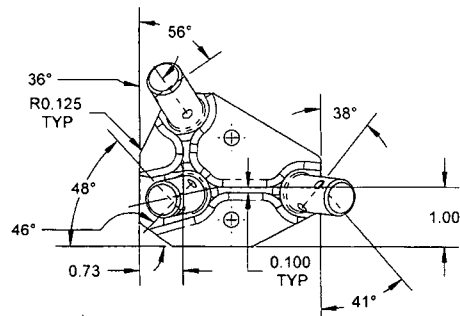
NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

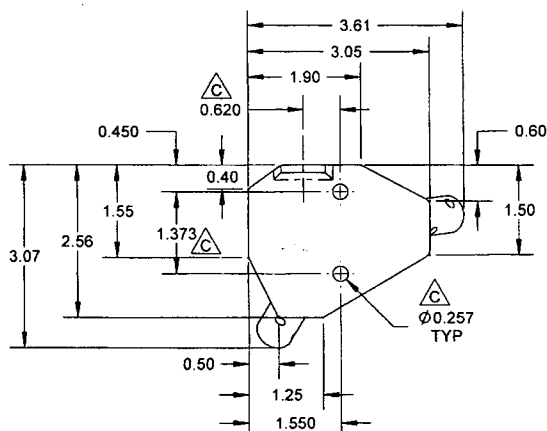
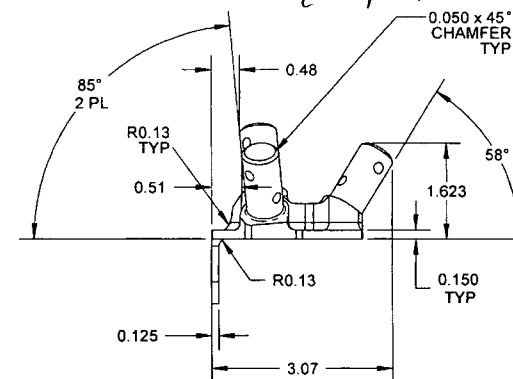
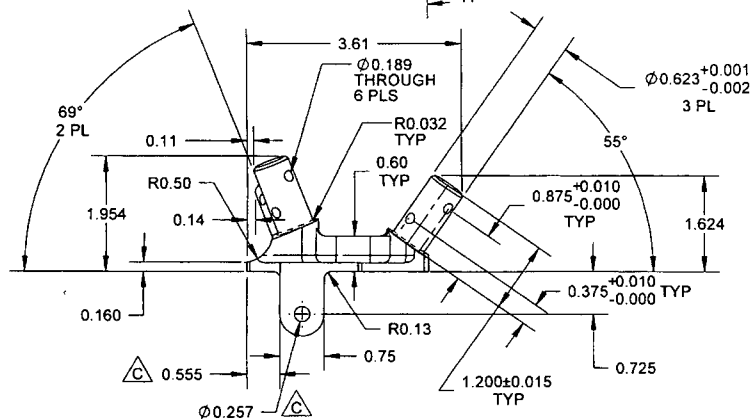
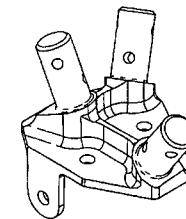
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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 89361 MCT
12/08/29



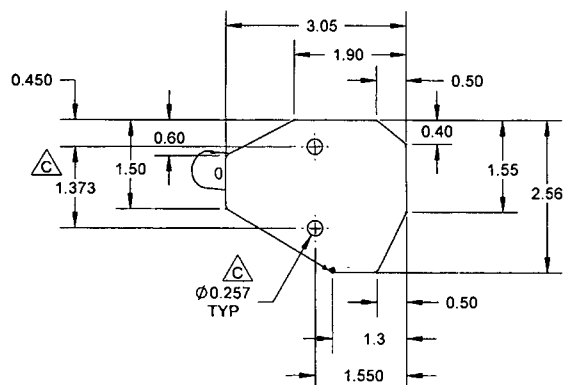
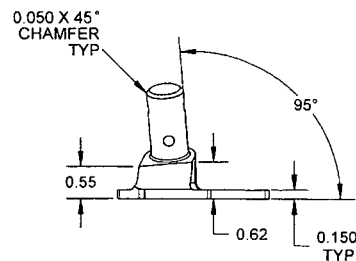
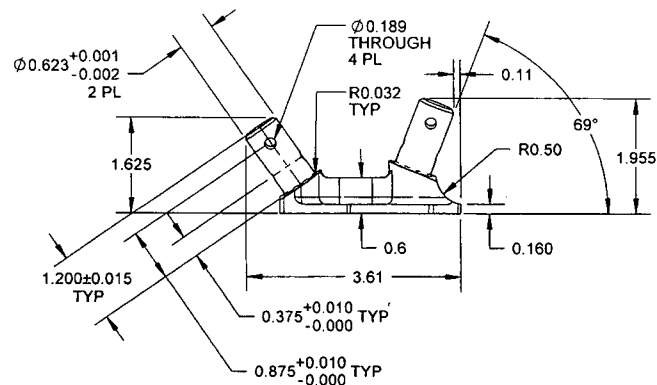
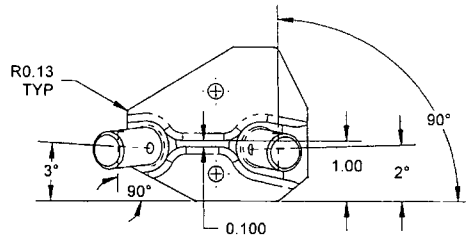
D3687-1 MOUNT

- NOTES:
- 1) MATERIAL: 17-4PH SS BAR PER AMS 5643, H-900 CONDITION
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.81 lb
 - 8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

RELEASED
2009-08-22
MCT

C	0.555 WAS 0.50 (ZN B8-1); 1.373 WAS 1.375 (ZN A8-1, A8-2); ADD 0.620 (ZN B7-1) PER NCR09-084; UPDATE NOTE 8 TO REF QSI (ZN A6-1, B3-2); Ø0.257 WAS Ø0.250 (ZN A6-1, B7-1, B7-2)	RF	09.08.26
B	CHANGE TO 17-4PH H-900 (ZN A6-1 & B3-2); R0.032 WAS R0.015 (ZN C7-1 & C7-2); REFORMATTED TO CURRENT DWG STANDARDS	RF	08.11.24
A	NEW ISSUE	RF	08.03.12
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3687 SHEET 1 OF 2 TITLE MOUNT SCALE NTS	
DRAWN	RF		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	09.08.26		

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D3687-3 MOUNT

NOTES:

- 1) MATERIAL: 17-4PH SS BAR PER AMS 5643, H-900 CONDITION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.64 lb
- 8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

RELEASED
2009-09-22
MP

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. C
MFG. APPR.	RF	D3687	SHEET 2 OF 2
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	MOUNT	NTS
DATE	09.08.26	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO17859**

Purchase Order Date 9/10/12

PO Print Date 9/18/12

Page Number 1 of 1

Order From :

VC-GLO001

ARCHER PRECISION INC.
2228 GLADWIN CRESENT
OTTAWA, ON K1B 4S6
CA

Contact Name
Vendor Phone 613 899 2405
Vendor Fax
Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3687-1P	MOUNT	10/05/12 Yes	12.00 Each	FedEx PI collect	\$400.0000	\$4,800.00

Special Inst: AS PER DWG D3687 REV.C
B89361
PLEASE ADVISE DELIVERY AND
PRICES.

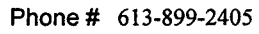
PO Total: \$4,800.00



Change Nbr: 2

Change Date: 9/18/12

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO



Date	Invoice #
11/10/2012	297

Ship To
Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7

P.O. No.	Ship	Via	FOB	Project
17859	11/10/2012	delivered	Archer	

[illegible]



2228 Gladwin Cres.
Ottawa, Ontario
K1B 4S6

Telephone (613) 899-2405
Fax (613) 226-1719

Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

Po Number	Part Number	Quantities
17859	D3687-1P	12

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 17859 issued by Dart Aerospace Inc.

A handwritten signature in black ink, appearing to read "Alex Mazerolle", is written over a horizontal line.

Alex Mazerolle
President
Archer Precision Inc.
2228 Gladwin Cres.
Ottawa, Ontario
K1B 4S6



Inspection Report

Customer Name Dart Aerospace	QTY 8	DWG # D3687-1	REV. C	Part Name Mount	Date 11/01/09	Lot# 013	Job # 013
--	-----------------	-------------------------	------------------	---------------------------	-------------------------	--------------------	---------------------

Page 1 of 1	Inspection Interval ALL	Special Notes
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Item #	DWG. Dim	Tolerance	Operator	QA First Off		QA Final		2		3	4	5	6	7	8	9	10	11	12
			First Off	A	R	A	R												
	Rev	C	✓	✓		✓													
	MAT	17-4PH	✓	✓		✓													
	SUB	None	✓	✓		✓													
	Deburr	Yes	✓	✓		✓													
1	.73	±.010	.725	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP
2	46°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
3	48°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
4	R.125	±.010	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
5	36°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
6	56°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
7	38°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
8	1.00	±.030	1.005	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP
9	41°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
10	0.100	±.010	.101	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP
11	0.160	±.010	.162	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP
12	1.954	±.010	1.950	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP
13	0.14	±.030	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
14	R0.50	±.030	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
15	69°	±1/2°	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
16	0.11	±.030	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
17	3.61	±.030	3.603	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP
18	Ø0.189	+0.005/-0.001	.189	✓		✓		.189		.189	.189		.189	.189		.189	.189	.189	.189
19	6PL	-	6	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
20	R0.032	±.010	PP	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓	✓
21	0.60	±.030	.601	✓		✓		PP		PP	PP		PP	PP		PP	PP	PP	PP

22	Ø0.623	+0.001/-0.002	.6226	✓	/	/	.6228	.6224	.6227	.6225	.6231	.6227	.6227	.6221	.6224	.6227	.6226
23	55°	±1/2°	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
24	1.624	±.010	1.625	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
25	0.875	+0.010	.874	✓	/	/	.875	.874	.874	.876	.874	.875	.875	.875	.876	.875	.875
26	0.375	+0.010	.375	✓	/	/	.375	.374	.375	.375	.374	.376	.375	.374	.376	.376	.374
27	0.725	±0.010	.725	✓	/	/	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725
28	1.200	±0.015	1.200	✓	/	/	1.198	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200
29	0.75	±.030	.75	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
30	R.13	±.030	R.125	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
31	85°	±1/2°	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
32	R0.13	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
33	0.51	±.010	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
34	0.48	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
35	0.050	±.010	.052	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
36	45°	±1/2°	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
37	58°	±1/2°	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
38	1.623	±.010	1.620	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
39	0.150	±.010	.150	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
40	R0.13	±.010	R.125	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
41	3.07	±.030	3.069	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
42	0.125	±.010	.125	✓	/	/	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125
43	3.61	±.010	3.609	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
44	3.05	±.010	3.052	✓	/	/	3.052	3.051	3.051	3.052	3.051	3.052	3.052	3.051	3.051	3.052	3.052
45	1.90	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
46	0.620	±.010	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
47	0.450	±.010	.452	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
48	0.40	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
49	1.55	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
50	2.56	±.030	2.561	✓	/	/	2.561	2.561	2.561	2.562	2.561	2.561	2.562	2.561	2.561	2.561	2.561
51	3.07	±.030	3.069	✓	/	/	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
52	0.50	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
53	1.25	±.030	PP	✓	/	/	/	/	/	/	/	/	/	/	/	/	/
54	1.550	±.010	1.553	✓	/	/	1.552	1.551	1.550	1.550	1.552	1.551	1.551	1.552	1.552	1.552	1.551

[illegible]



LIQUID PENETRANT TEST REPORT

P- 12685

CLIENT
ATTENTION
ADDRESS
PROJECT
ITEM(S) EXAMINED

DART AEROSPACE
MAT
1270 ABERDEEN ST
HAWKESBURY, ON.

DATE

Nov. 20/2012 TIME AM ☒ PM ☐
180-12-0822

ACUREN JOB No.

PO/NO No.

WORK LOCATION

ACCEPTANCE STD.

SAME

ASTM 1417/251-030

REV./DATE

2005

F.P.I. ON CROSS TUBES, MACHINED PARTS
(7)

JOB DESCRIPTION

PROCEDURE No. LT 002 REV./DATE

2008

TECHNIQUE No.

LT 002

REV./DATE

2008

PART No.

SCOPE

SEE RESULTS

MATERIAL

STAINLESS ALUMINUM THICKNESS

VARIABLE

A JET FLUORESCENT DYE PENETRANT INSPECTION WAS
CARRIED OUT 100% EXTERNAL SURFACE.

TEST DETAILS

METHOD	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH	<input type="checkbox"/> SOLVENT REMOVABLE	<input type="checkbox"/> POST EMULSIFIED
FAMILY BRAND	MAGNAFLUX		BLACK LIGHT S/N	16459	<input type="checkbox"/> OUTPUT > 1000 μ W/cm ²
PENETRANT	2LG7	MINIMUM DWELL TIME	450	MIN.	<input type="checkbox"/> AMBIENT < 2 fc
PENETRANT REMOVER	H2O	MINIMUM DRY TIME	>10	MIN.	<input type="checkbox"/> OUTPUT > 100 fc @ SURFACE
DEVELOPER	SKD 52	MINIMUM DWELL TIME	10	MIN.	OTHER LABINO
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS	<input type="checkbox"/> AQUEOUS	<input type="checkbox"/> DRY	LIGHT METER S/N	1098966
				CAL DUE DATE	Nov 24 2012

TEST SURFACE

SURFACE CONDITION	<input type="checkbox"/> AS GROUND	<input type="checkbox"/> AS WELDED	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> SHOT BLASTED	<input checked="" type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F	<input type="checkbox"/> -4°C/ 20°F TO 10°C/ 50°F	<input type="checkbox"/> 10°C/ 50°F TO 52°C/ 125°F	<input type="checkbox"/> > 52°C/ 125°F	

RESULTS-

☒ METRIC ☐ IMPERIAL

ITEM	COMMENTS	ACCEPT	REJECT
12 - Mount, W.O. # 89361		✓	
1 - CROSSTUBE - W.O. # 92890		✓	
1 - " " " # 92889		✓	
1 - " " " # 92745		✓	
1 - " " " # 90206		✓	
1 - " " " # 79630		✓	
1 - " " " # 92708		✓	
1 - " " " # 92707			X

Scope of Services
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE

Matthew Murdoch

PRINT

Matthew Murdoch

SIGNATURE

TECHNICIAN (SIGNATURE):

Mike Johnston

NAME (PRINT):

CGSB LEVEL 1st TECHNICIAN
SNT LEVEL 1st
CGSB REG. No. 6606

CGSB LEVEL 2nd TECHNICIAN
SNT LEVEL
CGSB REG. No.

DTR #

E-120597

REPORT

REVIEWED BY:

NAME

INITIALS

WHITE - CLIENT COPY

CANARY - OFFICE COPY

PINK - TECHNICIAN COPY

GOLD - OFFICE COPY

PT Sept 21